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(54) Title: POLYAMINE-MEDIATED TRANSFECTION

(57) Abstract: The present invention provides cationic lipids and methods that facilitate nucleic acid delivery and which also yield biologically benign metabolites following transfection. The compounds are lipidic polyamines that use a pentaerythritol scaffold to link different hydrophobic and DNA-binding domains.



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# INTERNATIONAL SEARCH REPORT

International application No.

PCT/US03/17281

## A. CLASSIFICATION OF SUBJECT MATTER

IPC(7) : A61K 9/127

US CL : 424/450

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

U.S. : 424/450

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)  
Registry, Caplus, Caold

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	LIZARZABURU, et al, A Versatile Synthesis of Tetraester Polyamin Lipids for Gene Transfection, Tetrahedron Letters 1999, Vol. 40, No. 51, pages 8985-8988, see entire document.	20-24
---		1-17, 25-41
Y	US 2002/0031763 A1 (KOLBE et al) 14 March 2002, paragraphs 1, 31, 34, 35, 37, and 88.	2-4, 14-17, 31, 32, 39, 40
---		18, 19
A		

☐ Further documents are listed in the continuation of Box C.

☐ See patent family annex.

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"X"

document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y"

document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art

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